



CLIMATE ENERGY FINANCE

Happy Anniversary Snowy 2.0

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March 17 was the seventh anniversary of the Turnbull Government announcing the Snowy 2.0 pumped hydro project. When announced in **March 2017** the project was expected to cost \$1.7b and be up and running by 2021, in time to replace the Liddell power station. No mention was made of transmission.

Since that time the project has been plagued by overruns and delays. The transmission aspect of the project, which does not have a DA as yet, has also faced multiple delays and overruns.

In **April 2019** Salini Impregilo and Clough announced a \$5.1b contract to build the project. Completion was scheduled for 2026.

In **March 2020** Transgrid released an initial cost estimate of \$1.3b for 360km of transmission lines, which were named Humelink. In [September 2021](#) this was raised to \$3.3b.

In **March 2022** the AFR reported that Humelink would cost \$3.3b and be ready by 2027 while the Victorian link would cost \$3.0b and be operational by 2032.

In **April 2022** in an interview with the AFR the Snowy CEO hinted at further delays and cost increases. In **May 2023** the SMH reported that costs had risen to \$5.9b with output in 2029. Instead of opening in time to replace Liddell in 2023, Eraring in 2025, or service Western City Airport in 2026 Snowy 2.0 was in a race for the 2032 Brisbane Olympics.

It was at this point that the Albanese government had the easy option to exit the project. Snowy had probably spent \$2.0b, no real money had been spent on transmission and they could blame it on the Morrison government. They chose to push on.

In **August of 2023** the ABC reported that the capital cost had doubled to \$12b with full operations due by 2028. The Guardian also reported that Humelink was now expected to cost \$5b. The AFR reported that the Commonwealth would have to invest a further \$3b into Snowy.

In **2020**, as it was becoming clear that Snowy was a disaster, the Morrison Government announced that if the private sector did not commit to building 1000MW of firming capacity by April 2021 the government would do so. Because of course the government had demonstrated an obvious expertise in developing power stations.

The Government was, despite AEMO saying there were no issues, panicking about the Liddell closure. In **May 2021** Energy Australia announced that it would invest \$300m and receive NSW and Commonwealth grants of \$83m to add 316MW of gas fired capacity at Tallawarra B.

In **April 2021** Snowy Hydro announced plans to build a much larger plant at Kurri Kurri in the Hunter Valley. The EIS was for a two turbine 750MW facility that was expected to run in emergency situations only (roughly a minute a month or thereabouts). The capital cost would \$610m plus \$264m for a 20km spur line to the Sydney-Newcastle gas line. All would be completed by the time Liddell closed.

In general gas plants are pretty straight forward. One contracts an EPC or EPCM provider (WOR, UGL), they purchase the required equipment from GE or a competitor, a slab is laid, a fence built around the perimeter, the turbines installed. In Australia gas plants cost \$1.3-1.4m per MW of capacity.

No one with possession of a calculator believed the Kurri Kurri capital cost estimates.

In **December 2021** the NSW Government approved the Kurri Kurri plant and pipeline. As an aside there are parts of Sydney where a garage cannot get approval in 8 months. This was quick.

In **March 2022** then Energy Minister Angus Taylor was quoted as saying that Kurri Kurri could replace not just Liddell but also Eraring.

In **June 2022** APA [announced](#) that it had signed an agreement (subject to final engineering modifications) to build and own the pipeline and gas storage for \$264m. A late 2023 opening was planned.

By June 2022 despite lightning fast approvals from the NSW Government Kurri Kurri was now delayed beyond the planned closure of Liddell.

In **August 2023** as a footnote to the Snowy 2.0 cost blowout it was announced that Kurri Kurri costs were now expected to be \$900m.

In **November 2023** APA announced it had signed a final pipeline contract with Snowy Hydro. The pipeline would now cost \$450m, a 70% increase on the estimates from 17 months previous. Completion would clearly not be in 2023.

In **April 2023** Liddell closed.

None of the billions of dollars of projects the Commonwealth had committed to in order to cope with closure were close to opening. Some were not even close to being approved. And yet the lights have stayed on, primarily because Mr Market convinced the owners of buildings to invest in rooftop solar.

In 2019, when the disastrous decisions were being made on Snowy 2.0, rooftop solar output was 8109 GW, or 53% of hydro. By 2021 that had risen by 65% to 13,449 GW or 90% of hydro. By 2023 it had risen by a further 75% to 23,521 GW or 156% of hydro.

Without a dollar of incremental Commonwealth funding thousands of citizens invested hundreds of millions of dollars at attractive returns. The incremental production since 2019 is 15,412GW. This equates to 100% of all annual east coast hydro electricity production. It is many multiples of what Snowy 2.0 will produce in the ten years from first announcement. It may well be what Snowy 2.0 produces in total over the coming decade.

In **February 2024** Snowy Hydro dragged a number of journalists down to look at progress on the project. Florence, the long bogged cutting machine, is back working. A fourth machine may be procured. The project is nearly half done.

The key statement by the MD was that Snowy 2.0 would generate a return of more than 7% pa on opening. Count me as dubious.

A 7% return on a \$12b project equates to average EBIT of \$840m. Over the past decade Snowy Hydro, which includes Snowy 1.0, retailer Red Energy and three gas plants has barely averaged \$400m EBIT. For the years in which generation earnings are separately reported they have averaged around \$330m.

To suggest that Snowy 2.0 will produce half the power of Snowy 1.0 at twice or three times the profitability beggars belief.

The alternate analysis is that the project is little changed in output from the \$1.7b 2017 project. If observers thought at the time that project would generate \$800m of EBIT, a near 50% return, the Commonwealth would have been over run with offers from the private sector to build it. There was, of course, no such interest.

It is fine to believe in Cinderella. But one also has to believe in midnight.